CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 96-05 NPDES PERMIT NO. CA0001368

FOR THE

SAN DIEGO GAS AND ELECTRIC COMPANY SOUTH BAY POWER PLANT SAN DIEGO COUNTY

A. MONITORING PROVISIONS

- 1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in Order No. 96-05 or in this monitoring and reporting program and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer. Samples shall be collected at times representative of "worst case" conditions with respect to compliance with the requirements of Order No. 96-05.
- Appropriate flow measurement devices and methods 2. consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ±10 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
 - (a) "A Guide to Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
 - (b) "Water Measurement Manual," U.S. Department of

Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)

- (c) "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.)
- (d) "NPDES Compliance Sampling Manual," U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, CO 80225.)
- 3. Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under Title 40, United States Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures are specified in Order No. 96-05 and/or in this monitoring and reporting program and/or by the Executive Officer.
- 4. Monitoring results must be reported on forms approved by the Executive Officer. Duplicate copies of the monitoring reports signed and certified as required by Reporting Requirement F.13 of Order No. 96-05 must be submitted to the USEPA and the Regional Board at the addresses listed in Reporting Requirement F.15 of Order No. 96-05.
- 5. If the discharger monitors any pollutant more frequently than required by Order No. 96-05 or by this monitoring and reporting program, using test procedures approved under 40 CFR Part 136, or as specified in Order No. 96-05 or this monitoring and reporting program or by the Executive Officer, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.
- 6. The discharger shall retain records of all monitoring

information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by Order No. 96-05 and this monitoring and reporting program, and records of all data used to complete the application for Order No. 96-05, for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of the Executive Officer at any time.

- 7. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in Order No. 96-05 or this monitoring and reporting program.
- 8. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer.
- 9. The discharger shall report all instances of noncompliance not reported under Reporting Requirement F.6 of Order No. 96-05 at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement F.6.
- 10. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The individual(s) who performed the sampling or measurements;
 - (c) The date(s) analyses were performed;
 - (d) The individual(s) who performed the analyses;
 - (e) The analytical techniques or methods used; and
 - (f) The results of such analyses.

In addition, records of all cooling water intake monitoring, combined discharge monitoring, and receiving water monitoring shall include:

- (g) The applicable tide table for the days on which sampling/monitoring was conducted; and
- (h) The moon phase (in days after the new moon) for the days on which sampling/monitoring was

conducted.

- 11. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.
- 12. The discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. An annual report shall be submitted by March 30 of each year which summarizes the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by USEPA or the Regional Board, the discharger will participate in the NPDES discharge monitoring report QA performance study. The discharger should have a success rate equal or greater than 80 percent.
- 13. Laboratory method detection limits (MDLs) and practical quantitation levels (PQLs) shall be identified for each constituent in the matrix being analyzed with all reported analytical data. Acceptance of data shall be based on demonstrated laboratory performance.
- 14. Monitoring results shall be reported at intervals and in a manner specified in Order No. 96-05 or in this monitoring and reporting program.
- 15. This monitoring program may be modified by the Executive Officer or the Regional Board, as appropriate.

B. BAR RACK AND INTAKE STRUCTURE MONITORING

The following shall constitute the monitoring for the bar rack and intake structure:

The discharger shall annually measure bar rack approach velocity and sediment accumulation at the intake structure and shall submit to the Executive Officer an annual summary describing any operational difficulties at the intake structure or the bar rack. The discharger shall also discuss preventive maintenance and corrective measures taken to assure intake water velocities

are as close as practical to design levels.

This monitoring requirement may be deleted if SDG&E demonstrates to the satisfaction of the Executive Officer that no substantive changes in bar rack approach velocity and sediment accumulation have occurred since monitoring was initiated and the likelihood of future changes is remote.

C. COOLING WATER INTAKE MONITORING

1. <u>Sampling/Monitoring Location</u>

Cooling water intake sampling/monitoring shall be conducted at the west end of the intake basin, halfway across the intake channel.

2. Cooling water intake monitoring shall be conducted as specified below.

| Parameter | Units | Sample ^{1/10/} Type | Minimum Frequency of Analysis | Reporting Frequency |
|------------------------------------|---|--|-------------------------------------|------------------------|
| Temperature | ۰F | Measurement | Continuous ^{2/14/} | Monthly |
| Salinity | 0/00 | Grab or Measurement (within 2 feet of surface and just above the bottom) | Monthly ^{14/} | Monthly |
| Dissolved Oxygen | mg/l & percent satura- tion ^{8/} | Grab or Measurement (within 2 feet of surface and just above the bottom) | Monthly ^{13/14/} | Monthly |
| рН | pH units | Grab | Monthly ^{3/} | Monthly |
| Transparen- cy | Meters (Secchi Disk) | Measurement | Monthly ^{15/} | Monthly |
| Acute Toxicity ^{7A/7B} | 7A/7B/ | 7A/7B/ | Quarterly | Quarterly |
| Chronic Toxicity ^{7C/} | TÜC | 24-hr. composite | Quarterly | Quarterly |

Note: oF = Degrees Fahrenheit

mg/l = milligrams per liter

0/00 = parts per thousand

Note:

The discharger may, at its option, conduct intake water monitoring for additional constituents for use in determining its net discharge. See Order No. 96-05, Discharge Specification B.1 regarding assumptions about intake water characteristics to be used for purposes of determining compliance in the absence of intake water monitoring data.

D. COMBINED DISCHARGE MONITORING4/

1. Sampling/Monitoring Locations

Sampling/monitoring locations for the combined discharge from the South Bay Power Plant shall be as follows:

Sampling/Monitoring
Location Identification

Location Identification Sampling/Monitoring Location

1,000 ft from 52

At the combined discharge monitoring location used to determine compliance with Order No. 85-09 (Latitude 32° 36' 46.6", North; Longitude 117° 06' 04.5", West)

S2

At the west end of the discharge basin, halfway across the discharge channel (at approximately Latitude 32° 36' 48", North; Longitude 117° 05' 52", West)

Immediately upon the effective date of Order No. 96-05, combined discharge sampling/monitoring as specified below shall be initiated at sampling/monitoring location S1, unless other dates are specified in this monitoring and reporting program. Effective March 1997, combined discharge sampling/monitoring for all parameters except temperature shall be conducted concurrently at locations S1 and S2 and the results submitted in accordance with the frequencies specified in this Monitoring and Reporting Program. Combined discharge sampling/monitoring for all parameters except temperature may be discontinued at location S1 after December 15, 1999.

Until December 15, 1999, sampling/monitoring conducted at location S1 shall be used for determining compliance with the combined discharge requirements of Order No. 96-05 for all parameters. Effective December 15, 1999, sampling/monitoring conducted at location S2 shall be used for determining compliance with the combined discharge requirements of Order No. 96-05 for all parameters except temperature. Location S1 shall continue to be used for determining compliance with temperature limits in Order No. 96-05 after December 15, 1999.

2. Combined discharge monitoring shall be conducted as specified below.

| Parameter | Units | Sample ^{1/10/} Type | Minimum Frequency of Analysis | Reporting Frequency |
|--|----------------|---------------------------------|-------------------------------------|------------------------|
| Flow | MGD | | Continuous | Monthly |
| Temperature | ۰F | Measurement | Continuous ^{2/} | Monthly |
| Total Suspended Solids | mg/l lb/day | Grab | Monthly | Monthly |
| Grease and Oil | mg/l lb/day | Grab | Monthly | Monthly |
| Total Chlorine Residual ^{5/} | ug/l lb/day | Grab | Monthly | Monthly |
| рН | pH units | Grab | Monthly ^{3/} | Monthly |
| Arsenic | ug/l lb/day | Grab | Semiannual | Semiannual |
| Cadmium | ug/l lb/day | Grab | Semiannual | Semiannual |
| Chromium ^{6/} (Hexavalent) | ug/l lb/day | Grab | Semiannual | Semiannual |
| Copper | ug/l lb/day | Grab | Semiannual | Semiannual |
| Lead | ug/l lb/day | Grab | Semiannual | Semiannual |
| Mercury | ug/l lb/day | Grab | Semiannual | Semiannual |
| Nickel | ug/l lb/day | Grab | Semiannual | Semiannual |
| Silver | ug/l lb/day | Grab | Semiannual | Semiannual |

| Parameter | Units | Sample ^{1/10/} Type | Minimum Frequency of Analysis | Reporting Frequency |
|---|----------------|---------------------------------|-------------------------------------|------------------------|
| Zinc | ug/l lb/day | Grab | Semiannual | Semiannual |
| Cyanide | ug/l lb/day | Grab | Semiannual | Semiannual |
| Ammonia (expressed as Nitrogen) | ug/l lb/day | Grab | Semiannual ^{3/} | Semiannual |
| Acute Toxicity ^{7A/7B/} | 7A/7B/ | 7A/7B/ | Quarterly | Quarterly |
| Chronic Toxicity ^{7C/} | TUC | 24-hr. composite | Quarterly | Quarterly |
| Phenolic Compounds (non- chlorinated) | ug/l lb/day | Grab | Semiannual | Semiannual |
| Chlorinated Phenolics | ug/l lb/day | Grab | Semiannual | Semiannual |

Note: ug/l = micrograms per liter lb/day = pounds per day

E. METAL CLEANING WASTE MONITORING

Metal cleaning waste monitoring shall be conducted as specified below. This monitoring shall be conducted until the Executive Officer determines that the discharge of all metal cleaning wastes has been terminated. Samples of various metal cleaning waste streams may be composited in proportion to flowrate prior to analysis for compliance determination. 12/

| Parameter | Units | Sample ^{1/10/} Type | Minimum Frequency of Analysis | Reporting Frequency |
|------------------------------|----------------|---------------------------------|-------------------------------------|------------------------|
| Flow | MGD | | Continuous | Monthly |
| рН | pH units | grab | 11/ | Monthly |
| Total Suspended Solids | mg/l lb/day | 24-hr. composite | 11/ | Monthly |

| Solids | | | | |
|---------------------|----------------|---------------------|-----|---------|
| Grease and Oil | mg/l lb/day | Grab | 11/ | Monthly |
| Total Copper | mg/l lb/day | 24-hr. composite | 11/ | Monthly |
| Total Iron | mg/l lb/day | 24-hr. composite | 11/ | Monthly |
| PAHs ^{16/} | ng/l lb/day | 24-hr. composite | 11/ | Monthly |

F. LOW VOLUME WASTE MONITORING

Low volume waste monitoring shall be conducted as specified below. Samples of various low volume waste streams may be composited in proportion to flowrate prior to analysis for compliance determination. 12/

| Parameter | Units | Sample ^{1/10/} Type | Minimum Frequency of Analysis | Reporting Frequency |
|------------------------------|----------------|---------------------------------|-------------------------------------|------------------------|
| Flow | MGD | | Continuous | Monthly |
| Total Suspended Solids | mg/l lb/day | 24-hr. composite | Monthly | Monthly |
| Grease and Oil | mg/1 lb/day | Grab | Monthly | Monthly |

G. IN-PLANT WASTE STREAM MONITORING

- 1. The discharger shall maintain an in-plant waste discharge log which records the sources, dates, times, flowrates, and durations of all in-plant waste discharges (i.e. metal cleaning waste and low volume waste discharges). A copy of the log shall be submitted monthly
- 2. In-plant waste stream monitoring shall be conducted as specified below. This monitoring shall be conducted until the Executive Officer determines that the discharge of all in-plant wastes except for freshwater reverse osmosis (RO) brine has been terminated and SDG&E certifies that these constituents are not present in the in-plant waste discharge from the South Bay Power Plant. Samples of various in-plant waste streams may be composited in proportion to flowrate prior to

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analysis for compliance determination. 12/

| Parameter | Units | Sample Type ^{1/} | Minimum Frequency of Analysis | Reporting Frequency |
|--|----------------|------------------------------|--|------------------------|
| Flow | MGD | | Continuous | Monthly |
| Arsenic | ug/l lb/day | Grab | Semiannual | Semiannual |
| Cadmium | ug/l lb/day | Grab | Semiannual | Semiannual |
| Chromium ^{6/} (Hexavalent) | ug/l lb/day | Grab | Semiannual | Semiannual |
| Copper | ug/l lb/day | Grab | Semiannual | Semiannual |
| Lead | ug/l lb/day | Grab | Semiannual | Semiannual |
| Mercury | ug/l lb/day | Grab | Semiannual | Semiannual |
| Nickel | ug/l lb/day | Grab | Semiannual | Semiannual |
| Silver | ug/l lb/day | Grab | Semiannual | Semiannual |
| Zinc | ug/l lb/day | Grab | Semiannual | Semiannual |
| Cyanide | ug/l lb/day | Grab | Semiannual | Semiannual |
| Ammonia | ug/l lb/day | Grab | Semiannual | Semiannual |
| Phenolic Compounds (non- chlorinated) | ug/l lb/day | Grab | Semiannual | Semiannual |
| Chlorinated Phenolics | ug/l lb/day | Grab | Semiannual | Semiannual |
| Bis(2- chloroethoxy) methane | ug/l lb/day | Grab | Semiannual | Semiannual |
| Bis(2- ethylhexyl) phthalate | ug/l lb/day | Grab | Semiannual | Semiannual |

| Parameter | Units | Sample Type ^{1/} | Minimum Frequency of Analysis | Reporting Frequency |
|----------------------------|----------------|------------------------------|--|------------------------|
| Chloroform | ug/l lb/day | Grab | Semiannual | Semiannual |
| Chromium (III) | ug/l lb/day | Grab | Semiannual | Semiannual |
| Di-n-butyl phthalate | ug/l lb/day | Grab | Semiannual | Semiannual |
| Halomethanes ^{9/} | ug/l lb/day | Grab | Semiannual | Semiannual |

H. RECEIVING WATER MONITORING

Receiving water monitoring shall be conducted as specified below. Sampling, preservation, and analysis shall be by methods described in the discharger's report titled "Thermal Distribution and Biological Studies for the South Bay Power Plant, May 1973" (Thermal Effects Study), unless other methods are specified in Order No. 96-05, this monitoring and reporting program, or by the Executive Officer. The receiving water monitoring requirements may be modified by the Executive Officer at any time.

1. Station Locations

Unless otherwise indicated or unless different monitoring locations are specified by the Executive Officer, receiving waters shall be monitored at the following stations designated in the discharger's report titled "Thermal Distribution and Biological Studies for the South Bay Power Plant, May 1973":

E7, E5, F4, F3, F2, E4, E3, D4, C3, A3, N2

The approximate locations of the stations are shown on Attachment A to this monitoring program.

2. Receiving water monitoring shall be conducted in accordance with the following schedule:

| Parameter | Units | Sample ¹ / Type | Minimum Frequency of Analysis | Reporting Frequency |
|-------------|-------|-------------------------------|--|------------------------|
| Temperature | ۰F | Measurement (at 2 foot | Monthly ^{14/} | Monthly |

| Parameter | Units | Sample ^{1/} Type | Minimum Frequency of Analysis | Reporting Frequency |
|---------------------|---|--|--|------------------------|
| | | (at 2 foot depth intervals) | | |
| Salinity | 0/00 | Grab or Measurement (within 2 feet of surface and just above the bottom) | Monthly ^{14/} | Monthly |
| Dissolved Oxygen | mg/l & percent satura- tion ^{8/} | Grab or Measurement (within 2 feet of surface and just above the bottom) 13/ | Monthly ^{14/} | Monthly |
| Transparency | Meters (Secchi Disk) | Measurement | Monthly ^{15/} | Monthly |

I. CHLORINATION LOG

The discharger shall maintain a chlorination log which records all chlorination dates, times, durations, rates (pounds per day), and dosages (ug/l) for each unit of the South Bay Power Plant and the times of chlorine and toxicity monitoring. A copy of the log shall be submitted monthly.

J. COPPER: SPECIAL STUDY

After, but no later than six months after, termination of the discharge of metal cleaning wastes and low volume wastes (except for freshwater reverse osmosis brine) from South Bay Power Plant to San Diego Bay, the discharger shall initiate a special one year study to measure the concentration of copper in the South Bay Power Plant intake water and combined discharge and to determine the annual rate of copper emissions from the South Bay Power Plant to San Diego Bay. The study plan, procedures, analytical methods, and other particulars shall be subject to the approval of the Executive Officer and shall be modified as directed by the

Executive Officer. The results of the special study shall be submitted within two years after termination of the discharge of metal cleaning wastes and low volume wastes (except for freshwater reverse osmosis brine) to San Diego Bay.

K. ANNUAL SUMMARY OF MONITORING DATA

By July 30 of each year, the discharger shall submit an annual report to the Executive Officer. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the requirements of Order No. 96-05.

L. MONITORING REPORT SCHEDULE

Monitoring reports shall be submitted to the Executive Officer according to the dates in the following schedule:

| Reporting Frequency | Report Period | Report Due |
|------------------------|---|------------------------------------|
| Monthly | Each month the | By the last day of following month |
| Quarterly | January - March April - June July - September October - December | |
| Semiannual | January - June July - December | August 30 February 28 |
| Annual | January - December | July 30 |

Monitoring and Reporting Program Appendix A: Endnote References

Endnote references for Monitoring and Reporting Program No. 96-05 (NPDES No. CA0001368), SAN DIEGO GAS & ELECTRIC COMPANY, SOUTH BAY POWER PLANT, SAN DIEGO COUNTY.

- 1. A grab sample is defined as an individual sample of at least 100 milliliters collected over a period not exceeding 15 minutes. Grab samples shall be collected over a shorter period if necessary to ensure that the constituent/parameter concentration in the sample is the same as that at the sampling location at the time the sample is collected.
- 2. Temperature shall be recorded at a minimum frequency of once every two hours. The average intake and discharge temperatures for each calendar day shall be reported. The average and maximum temperature difference between intake and discharge temperatures for each calendar day shall also be reported.
- 3. pH shall be determined whenever total chlorine residual and ammonia are determined and whenever metal cleaning waste is discharged to San Diego Bay.
- 4. Combined discharge samples shall be collected and measurements shall be made after the corresponding intake water samples are collected and measurements are made. The time interval between intake water sample collection and measurement and the corresponding combined discharge sample collection and measurement shall closely approximate the cooling water transit time from the intake water monitoring/sampling location to the combined discharge monitoring/sampling location.
- 5. Samples shall be collected and analyzed for total chlorine residual at times when the concentrations of total chlorine residual in the combined discharge are greatest.
 - Combined discharge total chlorine residual concentrations shall be determined once every thirty minutes for twenty four hours.
- 6. The discharger may, at its option, report Total Chromium concentration and mass emission rate values for compliance determination.
- 7A. Effective immediately upon adoption of Order No. 96-05, intake water and combined discharge <u>acute</u> toxicity tests shall be conducted in accordance with Endnote 12A of Order No. 96-05. Samples for acute toxicity tests conducted in accordance with Endnote 12A of Order No. 96-05 shall be 24-hr. composites. Combined discharge samples for <u>acute</u> toxicity tests conducted in accordance with Endnote 12A of

Order No. 96-05 shall be collected at sampling/monitoring location S1 through the October-December 1999 quarter.

Acute toxicity tests conducted in accordance with Endnote 12A of Order No. 96-05 on samples collected at sampling/monitoring location S1 may be discontinued after the October-December 1999 quarter. Starting no later than the January-March 1999 quarter, combined discharge samples for acute toxicity tests conducted in accordance with Endnote 12A of Order No. 96-05 shall be collected at sampling/monitoring location S2.

7B. No later than the March-June 1997 quarter, in situ intake water and combined discharge <u>acute</u> toxicity tests shall be initiated. In situ combined discharge <u>acute</u> toxicity tests shall be conducted at sampling/monitoring location S2.

In situ intake water and combined discharge <u>acute</u> toxicity tests shall be conducted simultaneously. In situ combined discharge <u>acute</u> toxicity tests shall be started after the corresponding in situ intake water <u>acute</u> toxicity tests are started. The time interval between starting the intake water <u>acute</u> toxicity tests and the corresponding combined discharge <u>acute</u> toxicity tests shall closely approximate the cooling water transit time from the intake water monitoring/sampling location to the combined discharge monitoring/sampling location.

i. Units, Test Species and Methods For purposes of in situ <u>acute</u> toxicity monitoring, <u>acute</u> toxicity tests shall be conducted using test species and methods approved by the Executive Officer. Test results shall be expressed in terms of percentage survival of test organisms.

During the first in situ <u>acute</u> toxicity monitoring period, the discharger shall conduct tests with at least two species (one vertebrate and one invertebrate) approved by the Executive Officer. After this initial screening period, in situ <u>acute</u> toxicity monitoring shall be conducted using the species determined to be most sensitive during the screening period. Each year, in a different month than the previous screening period(s), the discharger shall re-screen, using species approved by the Executive Officer. After each re-screening period, in situ <u>acute</u> toxicity monitoring shall be conducted using the species determined to be the most sensitive during the most recent re-screening period.

ii. Quality Assurance Concurrent testing with culture water shall be conducted and the results shall be reported with the test results. If the culture water tests do not meet all the test acceptability criteria specified for the test method, the discharger shall re-test as soon as possible.

- 7C. Chronic toxicity tests measure sublethal effects (e.g., reduced growth or reproduction) on organisms exposed to test waters (e.g. effluent) compared to that of organisms exposed to control waters.
 - i. Units Chronic Toxicity (TUc) shall be expressed in Toxic Units Chronic (TUc), where:

 $TUC = \frac{100}{NOEL}$

and the NOEL (No Observed Effect Level) is expressed as the maximum percentage of test water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test approved by the Executive Officer.

- ii. Test Species and Methods Chronic toxicity tests shall be conducted using standard test species and methods approved by the Executive Officer. During the first chronic toxicity monitoring period, the discharger shall conduct tests with at least three species (one vertebrate, one invertebrate, and one plant) approved by the Executive Officer. After this initial screening period, chronic toxicity monitoring shall be conducted using the species determined to be most sensitive during the screening period. Each year, in a different month than the previous screening period(s), the discharger shall re-screen, using species approved by the Executive Officer. After each re-screening period, chronic toxicity monitoring shall be conducted using the species determined to be the most sensitive during the most recent re-screening period.
- iii. Quality Assurance
 Unless the test method specifies the use of lab water,
 dilution and control water shall be obtained from a
 location unaffected by the South Bay Power Plant
 discharge and approved by the Executive Officer. If
 the dilution water is different than the culture water,
 then culture water shall be used in a second control.

Concurrent testing with reference toxicants shall be conducted and the results shall be reported with the test results. If either the reference toxicant tests or the test water tests do not meet all the test acceptability criteria specified for the test method,

the discharger shall re-sample and re-test as soon as possible.

- 8. The ratio of the dissolved oxygen concentration in the receiving water to the dissolved oxygen concentration in the intake water shall also be reported.
- 9. Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide), chloromethane (methyl chloride), chlorodibromomethane, and dichlorobromomethane.
- 10. A composite sample is defined as a combination of at least eight sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
- 11. Metal cleaning waste discharges shall be monitored whenever metal cleaning wastes are discharged to San Diego Bay.
- 12. Measurements or estimates of flows of individual waste streams used as a basis for compositing shall be reported.
- 13. Intake water and receiving water dissolved oxygen concentrations shall be determined between noon and 5:00 PM.
- 14. Temperature and salinity shall be determined whenever dissolved oxygen is determined.
- 15. Intake water transparency and receiving water transparency shall be determined on the same day.
- 16. See Appendix I of the 1990 Ocean Plan for definition of terms.

| Ordered 1 | by | | | | | |
|-----------|----|-------|------|----|---------|--|
| | | John | Η. | R¢ | bertus | |
| | | Execu | utiv | ze | Officer | |

Date: November 14, 1996